←Thermal overloads and impacts:

Circuit	Problem	Impact
511 511		
2373	NORMAL OVERLOAD—cable into Newburyport above SN rating	Assuming system is not manually reconfigured to reduce load on cable, upon failure all load transferred to 2367 line. No customer interruption (both lines in parallel). 2367 line will overload during backup of 2373 (see below).
2356	NORMAL OVERLOAD—cable into Water Street above SN rating	Assuming system is not manually reconfigured to reduce load on cable, upon failure all load transferred to 2354 line. No customer interruption (both lines in parallel).
2396	CONTINGENCY OVERLOAD—upon loss of 2377 line	Assuming auto-transfers at W. Newbury #47, Hillside #66 were not blocked; 2396 could burn- down during backup of 2377. All customers in towns of Merrimac, Amesbury and Salisbury would experience an extended outage until repairs are made.
2367	CONTINGENCY OVERLOAD—upon loss of 2373, 2377 or 2394 lines	Assuming auto-transfers at Beach Road #7 and Newbury #60 were not blocked; 2367 could burndown during backup. All customers in towns of Newbury and Newburyport would experience an extended outage until repairs are made. Some customers in Georgetown would experience a temporary outage until manual transfer to backup is completed. Customers in Boxford and Topsfield would experience a momentary outage until automatic transfer is completed.
2373	CONTINGENCY OVERLOAD—upon loss of 2367 or 2394 lines	Assuming auto-transfer Newbury #60 was not blocked; 2373 could burn-down during backup of 2367 or 2394. UG cable on 2373 into Newburyport could fail during backup of 2367. All customers in towns of Newbury and Newburyport OR customers in towns of Ipswich, Rowley and Georgetown would experience an extended outage until repairs are made. Some customers in Georgetown could experience a temporary outage until manual transfer to backup is completed. Customers in Boxford and Topsfield would experience a momentary outage until automatic transfer is completed.
2394	CONTINGENCY OVERLOAD AND LOW VOLTAGE—upon loss of 2373 line	Assuming generation at Ipswich is not running, 2394 could burn-down during backup of 2373. All customers in towns of Ipswich, and Rowley as well as some customers in Georgetown would experience an extended outage until repairs were made. Some customers in Boxford would experience a momentary outage until automatic transfer is completed.